Sun Valley Area Drainage Master Plan



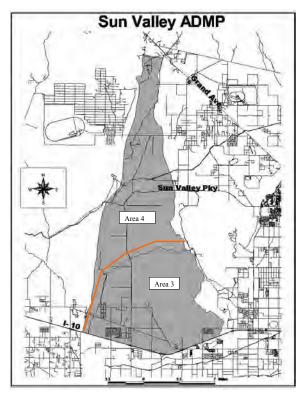
The Flood Control District of Maricopa County is developing an Area Drainage Master Plan (ADMP) to ensure responsible floodplain management and to coordinate flood control infrastructure improvements in conjunction with development.

The Sun Valley ADMP is located on the west side of the White Tank Mountains and is the northern part of the recently completed Buckeye/Sun Valley Area Drainage Master Study (ADMS). The Sun Valley ADMP encompasses approximately 183 square miles, which includes the Town of Buckeye as well as portions of unincorporated Maricopa County. The watershed is generally bounded by Gates Road on the north, the White Tank Mountains on the east, Interstate 10 on the south and the Hassavampa River on the west. For working purposes, the ADMP is divided into two areas, 3 and 4, as shown on the map to the right. Areas 3 and 4 are hydrologically similar but do have separate outfalls. Area 3 outfalls in the Buckeye Flood Retarding Structures. Area 4 outfalls into the Hassayampa River.

The Sun Valley area has numerous alluvial fans just downstream of the White Tank Mountains. Alluvial fans are fan-shaped sediment deposits located at a topographic break, such as a mountain front, that are made up of streamflow and/or debris flow sediment. Alluvial fans are considered hazardous because of their potential to have different flow paths and distributions at any given time during a runoff event.

Because of the beauty of the Sun Valley area, these alluvial fan areas have been identified by developers as desirable locations for construction of master planned communities. The District is working with the developers and their engineers to develop a master drainage plan that will comprise whole-fan solutions by controlling the runoff from the fan's apex (the point where the flows start to split) down to the the outfall.

The District will also identify potential multi-use and recreational facilities that will compliment and enhance the proposed project area as part of the plan.



Project Goals

- Delineation of alluvial fan floodplains not currently delineated;
- * Coordination between master planned community developments and the design of their drainage features:
- Preparation of concept designs of flood control facilities in areas not within a master planned community;
- * Incorporation of landscape aesthetics and multi-use recreational features in the concept design of flood control facilities.

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Need for Flood Control

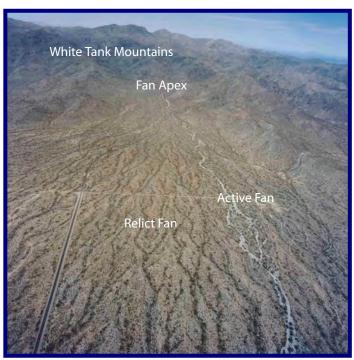
Alluvial fans are unstable by their very nature, and the potential flooding hazard at any point on a fan is substantial. Therefore, it is the goal of the District to create a regional approach to development on the fan. Possible solutions will consider all of the land area from the fan apex to the ultimate outfall.

Schedule

The District has contracted with JE Fuller/Hydrology & Geomorphology, Inc. to prepare the ADMP. JE Fuller began work in July 2005. The contract length is 12 months.

Stakeholders

- Arizona Department of Transportation
- Arizona Department of Water Resources
- Arizona Game and Fish Department
- Arizona Public Service
- Arizona State Land Department
- Buckeye
- Bureau of Land Management
- Central Arizona Project
- Fish and Wildlife Service
- Maricopa County Department of Parks and Recreation
- Maricopa County Department of Planning and Development
- Maricopa County Department of Transportation
- Natural Resource Conservation Service
- United States Army Corps of Engineers



Alluvial Fan

Contact

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